

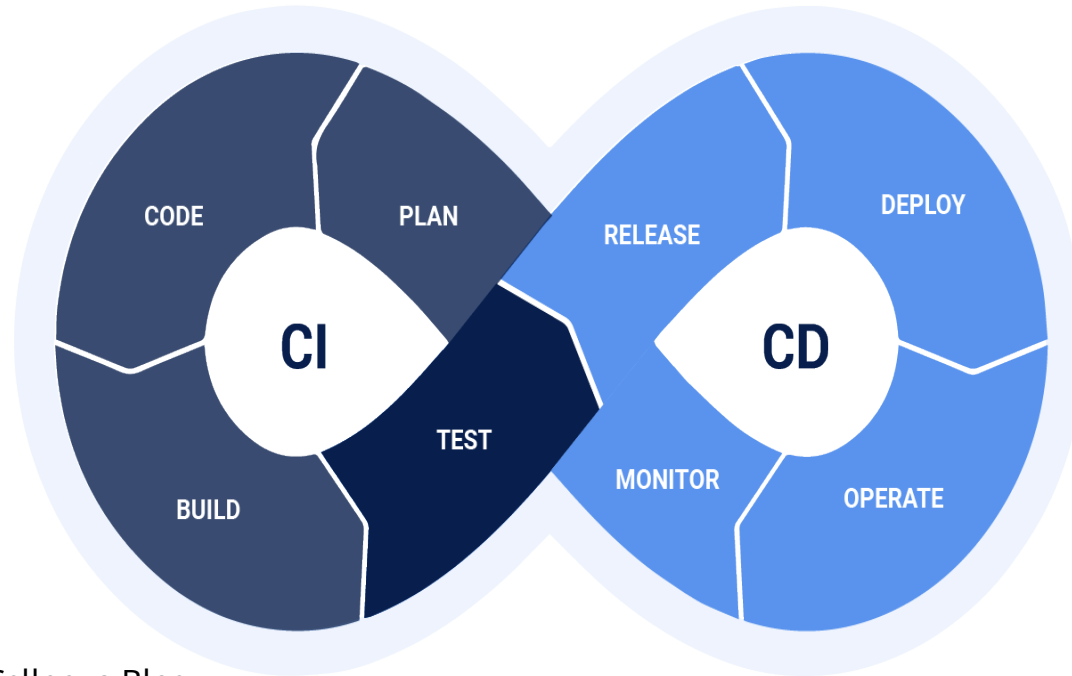
Présentation CI/CD

Guilhem : Introduction au CI/CD et à GitLab

Charly : Les Runners et fonctionnement global

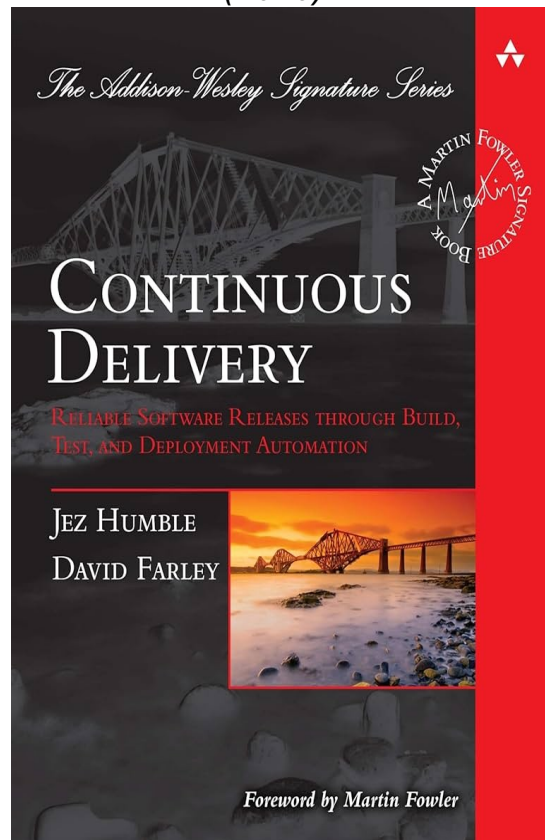
Peter : Structure et exemple concret d'une pipeline

C'est quoi le CI/CD ?



Source : Cellenza Blog

(2010)



Open-Source



(2001)

Hudson (2004)



Jenkins (2011)



GitLab CI (CE)
(2014)



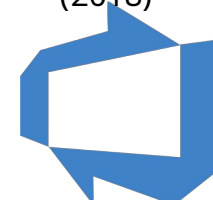
GitLab CI (EE)
(2014)



GitHub
Actions (2019)



Azure DevOps
(2018)



Propriétaire

Présentation de GitLab (CE)

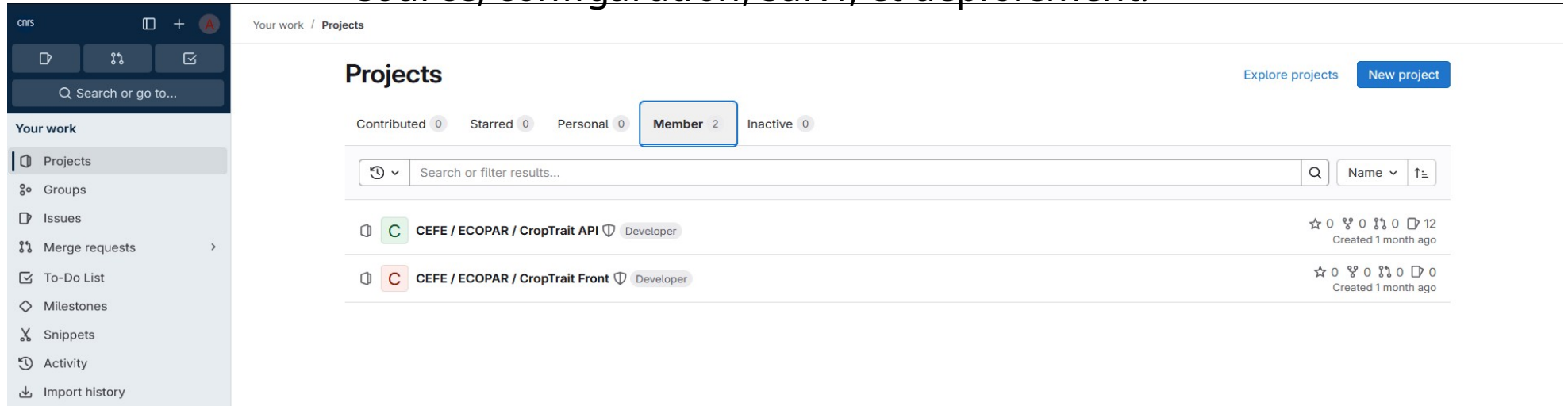
Basé sur Git, GitLab est une plateforme tout-en-un qui permet aux équipes de développer, tester, livrer et surveiller des applications, sur un seul outil intégré.

- Dépôts Git
- Gestion de projet
- Organisation du travail
- Intégration en continue
- Déploiement en continue
- Sécurité applicative



L'organisation par projet sur GitLab

C'est dans un projet GitLab que l'on organise tout ce qui concerne une application : code source, configuration, suivi, et déploiement.



Un projet contient : Le code source (géré via Git), le fichier `.gitlab-ci.yml` pour le CI/CD (pipeline), la gestion des tickets, les demandes de fusion, la documentation, les tableaux de bord, diagrammes, etc.

Project

C CropTrait API

Pinned >

Manage >

Plan >

Code >

Build >

Secure >

Deploy >

Operate >

Monitor >

Analyze >

CEFE / ECOPAR / CropTrait API / Activity

AllPush eventsMerge eventsIssue eventsCommentsWikiDesignsTeam

ALBERGE Guilhem @2kx3q5y8

1 day ago

joined project

POIRRIER Peter @tlb634zf

1 day ago

Pushed to branch `admin-dashboard`
`eb4fa607` · fix: patch filter operation + add multiple filters in one column

POIRRIER Peter @tlb634zf

1 day ago

Pushed to branch `admin-dashboard`
`c82396cb` · fix: add version to dependencies

POIRRIER Peter @tlb634zf

1 day ago

Pushed to branch `admin-dashboard`
`e792b476` · feat: add route for data from table with filters

Project members

Members can be added by project *Maintainers* or *Owners*

Members 26

Filter members

Q

Account f

Account	Source	Role	Expiration	Activity
<div>A</div> <div>ALBERGE Guilhem @2kx3q5y8</div> <div>It's you</div>	Direct member by MAEDER Charly	Developer	<div>Expiration date</div> <div></div>	<div>8* Jun 24, 2025</div> <div>✓ Jun 24, 2025</div> <div>✗ Jun 25, 2025</div> <div></div>
<div>A</div> <div>AUBOUIN Lucas @dy7q67xr</div>	Inherited from CEFE	Maintainer	<div>Expiration date</div> <div></div>	<div>8* Apr 09, 2025</div> <div>✓ Apr 09, 2025</div> <div>✗ Apr 09, 2025</div> <div></div>
<div>A</div> <div>AUTHIER Louise @srxzph2l</div> <div>Blocked</div>	Inherited from CEFE	Owner	<div>Expiration date</div> <div></div>	<div>8* Nov 21, 2023</div> <div>✓ Apr 26, 2024</div> <div>✗ Apr 26, 2024</div> <div></div>
<div>B</div> <div>BARTHES Nicolas @nicolas.barthes.5</div>	Inherited from CEFE	Owner	<div>Expiration date</div> <div></div>	<div>8* Mar 21, 2022</div> <div>✓ Apr 26, 2024</div> <div>✗ May 28, 2025</div> <div></div>

Project

C CropTrait API

🚀 Pinned >

👤 Manage >

📅 Plan >

</> Code >

🚀 Build >

🛡️ Secure >

📦 Deploy

🏠 Operate

📊 Monitor

📈 Analyze

🌱 CEFÉ / ECOPAR / CropTrait API / Issue Boards

Development ▾

Search

📄 0 + ⚙️

▾ in progress

📄 1 + ⚙️

Visualising data in a database

api front

📄 #13

▾ test

📄 0 + ⚙️

▾ done

📄 11 + ⚙️

Exception Handler

api front

📄 #12

Dépôt Git avec une structure de projet claire

api front

📄 #8

Initialisation projet

front

📄 #10

Open 12

Closed 0

All 12

Bulk edit

New issue



Search or filter results...



Created date ▾



📄 Log system

#15 · created 2 days ago by POIRRIER Peter

api done

updated 2 days ago

📄 Modify the database schema in the application

#14 · created 2 days ago by POIRRIER Peter

api done front

updated 2 days ago

Project

C CropTrait API

🚀 Pinned >

👤 Manage >

📅 Plan >

</> Code >

🚀 Build >

🛡️ Secure >

📦 Deploy >

🏠 Operate >

🖥️ Monitor >

📊 Analyze >

🔗 admin-dashboard ▾

croptrait-api / + ▾

Compare

Find file

Edit ▾

Code ▾



fix: patch filter operation + add multiple filters in one column

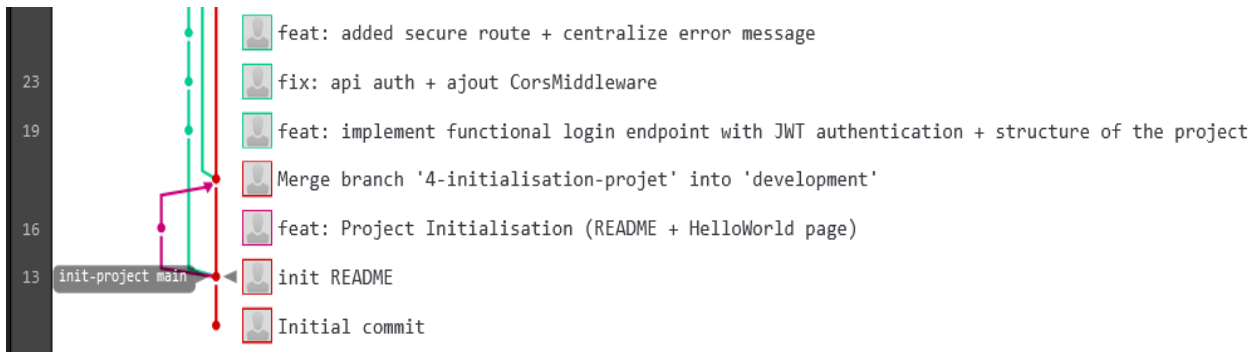
POIRRIER Peter authored 1 day ago

eb4fa607



History

Name	Last commit	Last update
📁 app	<div></div>	<div></div>
📁 scripts	<div></div>	<div></div>
📁 tests	<div></div>	<div></div>
📁 .dockerignore	<div></div>	<div></div>



Project

C CropTrait API

🚀 Pinned >

👤 Manage >

📅 Plan >

</> Code >

🚀 Build >

🛡️ Secure >

📦 Deploy >

⚙️ Operate >

📺 Monitor >

📊 Analyze >

Revue des pipelines déclenchés

All 14 Finished Branches Tags

[View analytics](#) [New pipeline](#)

Filter pipelines <input type="text"/>					Show Pipeline ID ▾
Status	Pipeline	Created by	Stages	Actions	
✓ Passed ⌚ 00:00:50 📅 1 week ago	fix: update gitlab-ci because image isn't recon... #17345 development → 8e019336 latest branch		✓	📄 ▾	
✓ Passed ⌚ 00:00:32 📅 1 week ago	fix: to test if production work like that (because... #17341 development → 26734345 branch		✓	📄 ▾	

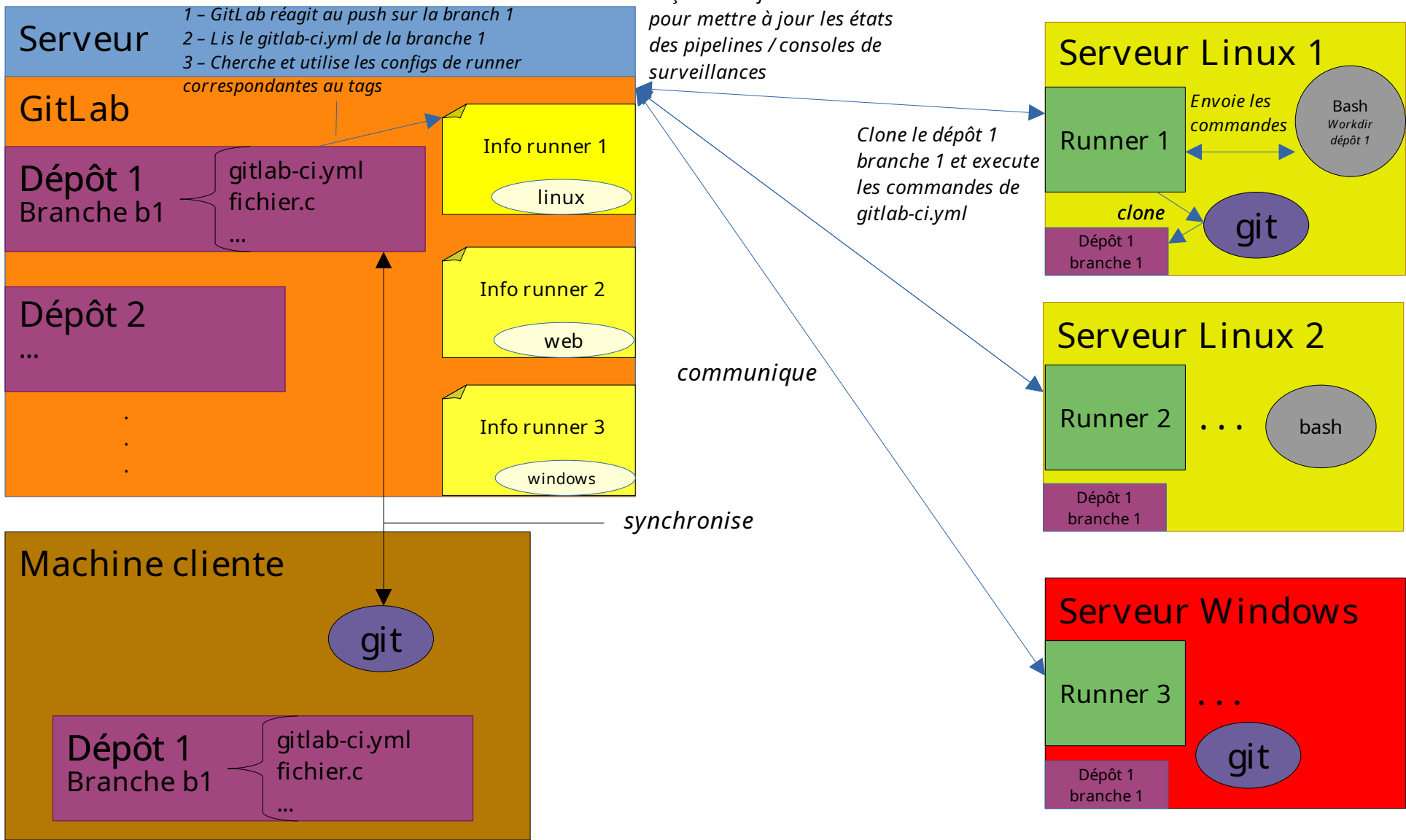
Revue des jobs

All 16 Finished

Filter jobs <input type="text"/>					<input type="text"/>
Status	Job	Pipeline	Coverage		
✓ Passed ⌚ 00:00:50 📅 1 week ago	#63689: build development → 8e019336 linux	#17345 created by Stage: build		🔄	
✓ Passed ⌚ 00:00:32 📅 1 week ago	#63681: build development → 26734345 linux	#17341 created by Stage: build		🔄	

Runner (Linux)

- C'est un binaire exécutable gitlab-runner, téléchargeable depuis les dépôts GitLab.
- gitlab-runner est un service qui écoute les envoies de message de Gitlab et exécute les pipelines sur son hôte.
- Le service gitlab-runner exécute les commandes de gitlab-ci.yml via l'utilisateur Unix gitlab-runner.
- Compatible aussi macOS, Windows et autres.



Annuaire des runners

Ajouter un nouveau runner dans l'annuaire des runners du projet GitLab

Project runners 🔒 2
These runners are assigned to this project.

Assigned project runners

● #23 (ZV3pGV5-) 🔒
dafnee-prod
dafnee editor prod

● #17 (8QbeJars) 🔒
sur dafneeditor-dev
dafnee dev editor

Create project runner

Delete runner

Delete runner

Tags utilisés dans le gitlab-ci.yml pour déterminer quel runner utiliser

Mettre en pause pour ne plus envoyer de message au runner et ne plus rien exécuter sur sa machine














Supprimer ce runner de l'annuaire des runners du projet GitLab


Pipeline

Nom de la branche où s'exécute le pipeline

Numéro du commit

Relancer/Réessayer un job

Status	Pipeline	Created by	Stages	Actions
 Passed 00:03:59 2 weeks ago	Rename SJR to scimago #783  main    		 	   

 Failed
00:00:08
2 weeks ago

Add feature to extract data for journal name lis...
#773  test  
 



build_prod_image

clean_prod



Durée d'exécution
Dernière exécution

ID du pipeline

Indique que c'est le dernier qui a été exécuté (ici pour cette branche)

Spécifique à une branche (peut ne pas l'être)

Message du commit

Créateur du pipeline (celui qui a push)

Jobs du gitlab-ci.yml pour cette branche

Jobs du gitlab-ci.yml pour cette branche

Télécharger l'artefact s'il est spécifié dans le gitlab-ci.yml


























Console d'un job

```
1 Running with gitlab-runner 17.3.1 (66269445)
2   on dafnee-dev 8QbeJars-, system ID: s_1d8af009732b
3   feature flags: FF_NETWORK_PER_BUILD:true
4 Preparing the "shell" executor 00:00
5 Using Shell (bash) executor...
6 Preparing environment 00:00
7 Running on dafnee-dev...
8 Getting source from Git repository 00:01
9 Fetching changes with git depth set to 20...
10 Reinitialized existing Git repository in /home/gitlab-runner/builds/8QbeJars-/0/mbb/dafneeditor/.git/
11 Checking out a19c851b as detached HEAD (ref is test)...
12 Skipping Git submodules setup
13 Executing "step_script" stage of the job script 02:01
14 $ podman volume create dafneeditor_db
15 dafneeditor_db
16 $ ( # collapsed multi-line command
17 time="2025-01-30T13:56:42+01:00" level=warning msg="missing \"SECRET_KEY\" build argument. Try adding \"--build-arg SECRET_KEY=<VALUE>\" to the command line"
18 STEP 1/49: FROM python:3.12-alpine
```

Variable et Environnement

Environnement où la variable est disponible
(à spécifier dans gitlab-ci.yml)

CI/CD Variables </> 31 Reveal values Add variable

Key ↑	Value	Environments	Actions
ADMIN_CONTACT  Expanded 	production 	 
ADMIN_CONTACT  Expanded 	test 	 
ALLOWED_HOSTS  Expanded 	production 	 
ALLOWED_HOSTS  Expanded 	test 	 
EMAIL_ADDRESS  Expanded 	production 	 

Nom de la variable à
utiliser dans gitlab-ci.yml

Valeur de la variable

Pipeline Simple

The screenshot displays the GitLab Pipeline Editor interface. On the left is a dark sidebar with navigation options: Project (testingCICD), Pinned, Issues (1), Merge requests (0), Manage, Plan, Code, Build, Pipelines, Jobs, Pipeline editor (selected), Pipeline schedules, Test cases, Artifacts, Secure, Deploy, Operate, Monitor, Analyze, and Settings. The main area shows the pipeline configuration for 'Poirrier Peter / testingCICD / Pipeline editor'. It indicates that Pipeline #31933 passed 9 months ago and that the syntax is correct. Below this, there are tabs for Edit, Visualize, Validate, and Full configuration. The Edit tab is active, showing a YAML configuration for a pipeline named 'mission_cefe_possible' with a 'build' stage and a script that echoes initialization, file analysis, and success messages. At the bottom, there are input fields for the 'Commit message' (Update .gitlab-ci.yml file) and the 'Branch' (internship).

Poirrier Peter / testingCICD / Pipeline editor

bs intership

✓ Pipeline #31933 passed
Pipeline passed for 540b1e98 9 months ago

✓ Pipeline syntax is correct. [Learn more](#)

Edit Visualize Validate Full configuration

CI/CD Catalog Help Editor accessibility guide

```
1 mission_cefe_possible:
2   stage: build
3   script:
4     - echo "Initialisation du protocole secret..."
5     - echo "Analyse du fichier."
6     - echo "Succès, Cefe accomplie, agent !"
7
8
9
```

Commit message

Update .gitlab-ci.yml file


Branch

internship

Résultat pipeline


```
1 Running with gitlab-runner 18.1.0 (0731d300)
2   on balrogrunner7 ygn8jwvHs, system ID: s_ffdd7a56668f
3 Resolving secrets
4 Preparing the "docker" executor 00:02
5 Using Docker executor with image ruby:2.6 ...
6 Using effective pull policy of [always] for container ruby:2.6
7 Pulling docker image ruby:2.6 ...
8 Using docker image sha256:b71cca836fff8e4f14f8575e25a157f3e253bcd1a039432f4980728c846603f7 for ruby:2.6 with digest ruby@sha256:a79c8ddb7f3d3748427e2d3a45dcae6d42f1d80d9ae3b98959b3a27b220bf434 ...
9 Preparing environment 00:00
10 Using effective pull policy of [always] for container sha256:5fe409a3f35a359cdddc66a4f3ac99fd1fe20b1945cc074bb3b9de962f8f215c
11 Running on runner-ygn8jwvHs-project-20044-concurrent-0 via balrog...
12 Getting source from Git repository 00:01
13 Gitaly correlation ID: 01JVF15SCF16QK22W303WWXSDV
14 Fetching changes with git depth set to 20...
15 Reinitialized existing Git repository in /builds/poirrierp/testingcicd/.git/
16 Created fresh repository.
17 Checking out 87125246 as detached HEAD (ref is intership)...
18 Removing Hello.class
19 Skipping Git submodules setup
20 Executing "step_script" stage of the job script 00:01
21 Using effective pull policy of [always] for container ruby:2.6
22 Using docker image sha256:b71cca836fff8e4f14f8575e25a157f3e253bcd1a039432f4980728c846603f7 for ruby:2.6 with digest ruby@sha256:a79c8ddb7f3d3748427e2d3a45dcae6d42f1d80d9ae3b98959b3a27b220bf434 ...
23 $ echo "Initialisation du protocole secret..."
24 Initialisation du protocole secret...
25 $ echo "Analyse du fichier."
26 Analyse du fichier.
27 $ echo "Succès, Cefe accomplie, agent !"
28 Succès, Cefe accomplie, agent !
29 Cleaning up project directory and file based variables 00:01
30 Job succeeded
```

Build logic



```
1
2 mission_cefe_possible:
3   stage: build
4   script:
5     - echo "Initialisation du protocole secret..."
6     - echo "Analyse du fichier."
7     - echo "Succès, Cefe accomplie, agent !"
8
9 cefe_test:
10  stage: test
11  script:
12    - echo "Lancement des tests chimiques..."
13    - echo "Personne n'est mort, cefe bon !"
```


Stage par défaut de gitlab ne nécessitant pas de configuration particulière



```
1
2 mission_cefe_possible:
3   stage: build
4   script:
5     - echo "Initialisation du protocole secret..."
6     - echo "Analyse du fichier."
7     - echo "Succès, Cefe accomplie, agent !"
8
9 cefe_test:
10  stage: Lorem_ipsum
11  script:
12    - echo "Lancement des tests chimiques..."
13    - echo "Jonh Doe est mort, cefe pas bon !"
```

Stage personnalisé nécessitant de définir les stages pour l'exécution des différents jobs

Utilisation de keyword

 Pipeline #34373 passed with warnings
Pipeline passed with warnings for `a22eca27` 12 seconds ago

✓ Pipeline syntax is correct. [Learn more](#)

[Edit](#) [Visualize](#) [Validate](#) [Full configuration](#)

[CI/CD Catalog](#) [Help](#) [Editor accessibility guide](#)



```
1
2 stages:
3   - build
4   - malenia
5
6 mission_cefe_possible:
7   stage: build
8   script:
9     - echo "J'ai pris putréfaction" > file1.txt
10    - echo "Cefe bon, j'ai les boulettes de préservation !" > file2.txt
11    - cat file1.txt file2.txt > compiled.txt
12    - exit 1 # <-- Force l'échec du job
13  artifacts:
14    paths:
15      - compiled.txt
16    when: always
17    allow_failure: true
18
19 cefe_test:
20   stage: malenia
21   script:
22     - head -n 2 compiled.txt
```

Suite utilisation de keyword

Update .gitlab-ci.yml file

 **Warning** Poirrier Peter created pipeline for commit `a22eca27`  1 minute ago, finished 1 minute ago

For `internship`

`latest` `branch`  2 jobs  9 seconds, queued for 0 seconds



Pipeline

Jobs **2**


Failed Jobs **1**

Tests **0**

build

 mission_cefe_possible 

malenia

 cefe_test 

Parallélisme et images

```
2 image: alpine:latest
3
4 stages:
5   - démonstration
6
7 tâche_1:
8   stage: démonstration
9   script:
10    - echo "● Tâche 1 - Exécution en parallèle"
11    - sleep 5
12    - echo "✅ Tâche 1 terminée"
13
14 tâche_2:
15   stage: démonstration
16   script:
17    - echo "● Tâche 2 - Exécution parallèle"
18    - sleep 3
19    - echo "✅ Tâche 2 terminée"
20
21 tâche_3:
22   stage: démonstration
23   script:
24    - echo "● Tâche 3 - Parallèle avec les autres"
25    - sleep 2
26    - echo "✅ Tâche 3 terminée"
```

Update .gitlab-ci.yml file

✓ Passed Poirrier Peter created pipeline for commit 67fb8442 🔄 20 seconds ago, finished just now

For [internship](#)

[latest](#) [branch](#) ⚡ 3 jobs ⌚ 12 seconds, queued for 0 seconds

Pipeline Jobs 3 Tests 0

démonstrati...

- ✓ tâche_1 🔄
- ✓ tâche_2 🔄
- ✓ tâche_3 🔄